

CLAIMS

1. Apparatus for synthesizing audio scores, the apparatus comprising:
a housing of approximately hand-held size;
a memory within said housing for storing coded audio event data;
5 a mechanism for downloading into said memory coded audio event data; and
digital-audio electronics within said housing for retrieving coded audio event data
from said memory, for converting said coded audio event data into an audio signal and for
playing out said audio signal audibly to a user of said device.

10 2. The device of claim 1, wherein said mechanism for downloading operates
wirelessly.

3. The device of claim 1, wherein said mechanism for downloading includes a
personal computer (PC) operated remotely from said device and wherein said means for
15 downloading operates wirelessly.

4. The device of claim 1 in which the coded audio event data is stored in accordance
with a musical instrument digital interface (MIDI) standard.

20 5. The device of claim 1 which further comprises:
one or more user controls on said housing, the user control enabling the user to
selectively out-play said audio signal.

6. The device of claim 5, wherein said user controls enable the user to select musical
25 event data from one or more audio tracks for out-play of said audio signal from a library
containing plural audio tracks.

7. The device of claim 5, wherein said user controls enable the user to select a mode
in which the out-play of the audio signal occurs.

30 8. The device of claim 7, wherein the mode of out-play includes one or more
operational modes.

9. The device of claim 7, wherein the mode of out-play includes one or more musical modes.

5 10. The device of claim 5, wherein the user control includes a thumb-operable multi-directional pressure-sensitive switch.

10 11. The device of claim 10, wherein the hat switch and the electronics are configured to enable a user to select one or more modes in which the out-play of the audio signal occurs, and wherein the modes include one or more of expression, pace and volume.

12. The device of claim 5 which further comprises:
a display on said housing, the display enabling a user to visually monitor the selective out-play of said audio signal.

15 13. A method of storing for synthesis and out-play coded audio event data recordings in a portable hand-held device, the method comprising:
storing coded audio event data in a memory contained within a portable hand-held device;
reading said coded event data from the memory;
20 processing said coded event data to produce an audio signal represented by said coded event data; and
audibly out-playing said audio signal from the portable hand-held device.

25 14. The method of claim 13, wherein said storing, reading and processing is of coded audio event data formatted in accordance with a musical instrument digital interface (MIDI) standard.

30 15. The method of claim 14 which further comprises, prior to said storing:
creating the coded audio event data on a remote processor.

16. The method of claim 14, wherein the remote processor is a personal computer (PC).

17. The method of claim 15 which further comprises, after said creating and prior to said storing:

downloading the coded audio event data from the remote processor to the hand-held device.

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18. An article of manufacture for use with a portable hand-held device for storing for synthesis and out-play of coded audio event data recordings, the article comprising a computer-readable medium containing a program, the program comprising:

storage firmware for storing coded audio event data in a memory contained within the portable hand-held device;

access firmware for reading the coded event data stored in the memory;

processor firmware for processing the coded event data read from memory to produce an audio signal represented by the coded event data; and

out-play firmware for audibly outplaying the audio signal from the portable hand-held device.

19. A computer-readable medium containing a program according to claim 16, wherein the program further comprises:

download firmware for downloading the coded event data to the portable hand-held device from a remote processor.

20. A portable hand-held apparatus for synthesizing audio scores, the apparatus comprising:

a mechanism for storing coded audio event data in a memory contained within a portable hand-held device;

a mechanism for reading the coded event data stored in the memory;

a mechanism for processing the coded event data read from the memory to produce an audio signal represented by said coded event data; and

a mechanism for audibly out-playing said audio signal from the portable hand-held device.

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